

I CLAIM:

*Sub a1* 1. A hitch assembly for mounting on a bicycle for connection to the tongue of a trailer, the hitch assembly comprising:

5 a hitch unit mounted to the bicycle above its rear wheel rotatable about a substantially vertical first pivot axis, the hitch unit adapted for connection to the trailer's tongue to enable the tongue to pivot about a substantially horizontal second pivot axis;

a support structure connected to the bicycle for mounting the hitch unit above the rear wheel so that the first pivot axis is maintained substantially vertical; and

10 a stabilizer detachably connected to the hitch unit and the bicycle to permit movement of the hitch unit relative to the frame and seat of the bicycle.

2. The hitch assembly of claim 1, wherein the support structure includes a wheelstay assembly adapted for pivotal connection to a skewer extending through the rear hub/axle assembly of the bicycle.

15 3. The hitch assembly of claim 2, wherein the stabilizer includes a strut member adapted for detachable and pivotal connection to the bicycle.

4. The hitch assembly of claim 3, wherein the strut member is pivotally connected to the wheelstay assembly.

5 5. The hitch assembly of claim 4, wherein the strut member is lengthwise-adjustable, so that the wheelstay assembly and hitch unit are maintained substantially vertical, relative to the ground, when the strut member is connected to the bicycle.

10 6. The hitch assembly of claim 5, wherein the wheelstay assembly includes a pair of elongate members, each extending from a mounting assembly positioned above the rear wheel and each including a socket at its end connected to the skewer extending through the rear hub/axle assembly.

15 7. The hitch assembly of claim 6, wherein the skewer extending through the rear hub/axle assembly is provided with spherical ends for reception in an associated socket.

20 8. The hitch assembly of claim 7, wherein the hitch unit is mounted on the wheelstay assembly above the rear wheel of the bicycle.

9. The hitch assembly of claim 5, wherein the strut member is provided with a seat post clamp at one end for detachable clamping to the bicycle's seat post, and wherein the strut member is pivotally connected to the clamp.

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10. The hitch assembly of claim 9, wherein the seat post clamp is provided with a pair of curved members pivotally movable for clamping to the bicycle's seat post.

11. The hitch assembly of claim 10, wherein the wheelstay assembly includes a mounting assembly for mounting the hitch unit, the mounting assembly including a bore for receiving a steerer tube for connection to the hitch unit rotatable within the bore.

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12. A hitch assembly for detachable mounting on a bicycle for connection to the tongue of a trailer, the hitch assembly comprising:

a wheelstay assembly detachably connected to the rear hub/axle assembly of the bicycle;

5 a hitch unit mounted on the wheelstay assembly above the rear wheel substantially directly above the rear hub/axle assembly, the hitch unit being rotatably journaled to the wheelstay assembly for pivoting about a substantially vertical first pivot axis and adapted for connection to the tongue of the trailer to enable pivoting of the tongue about a substantially horizontal second pivot axis; and

a strut member connected to the bicycle and to the wheelstay assembly to maintain the wheelstay assembly substantially vertical during up and down movement of the rear wheel relative to the bicycle's seat.

13. The hitch assembly of claim 12, wherein the wheelstay assembly is pivotally connected to the rear hub/axle assembly of the bicycle.

14. The hitch assembly of claim 13, wherein the strut member includes a first 20 end detachably and pivotally connected to the bicycle and a second end pivotally connected to the wheelstay assembly.

15. The hitch assembly of claim 14, wherein the first end of the strut member is connected to the bicycle's seat post, and wherein the strut member is adjustable lengthwise thereby to fix the distance between the hitch unit and the seat post.

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16. The hitch assembly of claim 15, wherein the wheelstay assembly is provided with a socket at one end thereof for pivotal mounting to a skewer extending through the rear hub/axle assembly.

17. A hitch assembly for detachable mounting on a bicycle for connection to the tongue of a trailer, the hitch assembly comprising:

a wheelstay assembly detachably and pivotally connected to the rear hub/axle assembly of the bicycle;

5 a hitch unit mounted on the wheelstay assembly above the rear wheel substantially directly above the rear hub/axle assembly, the hitch unit being rotatably journaled to the wheelstay assembly for pivoting about a substantially vertical first pivot axis and adapted for connection to the tongue of the trailer to enable pivoting of the tongue about a substantially horizontal second pivot axis; and

a lengthwise-adjustable strut member having a first end detachably and pivotally connected to the bicycle's seat post and a second end pivotally connected to the wheelstay assembly to maintain the wheelstay assembly substantially vertical during up and down movement of the rear wheel relative to the bicycle's seat.